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Disabled Students

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# Inclusive University Education Viewed by the Non Disabled Students

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*Abstract: In this paper we present a study that tried to understand how university students without disability evaluate the impact of disability on academic life. This study is part of a major research project: Integration processes and academic success of university students with disability, which is supported by the Portuguese Science and Technology Foundation. The purpose was to understand what they thought would have to change in their life in order to continue to study, if they had a disability. In order to see if there were differences between types of disabilities we distinguished three of them: physical, visual and hearing. 160 university students of different knowledge domains answered to a Perception of Disability Impact on Academic Life Questionnaire. We found that students with an affiliation to human and social sciences show more positive perception of the impact of disability on the academic involvement. In the same way, this positive perception is manifested by students who have a colleague with disability in their classes. Implications for university inclusive education will be discussed.*

Keywords: Inclusive Education, Motor and Sensorial Disabilities, University Students

## Introduction

**I**NCLUSIVE EDUCATION REFLECTS the growing value attributed to diversity and complexity, which only the interaction among different individuals allows. UNESCO's Conference Final Declaration, which took place in Salamanca, in June 1994 stimulated the inclusive education movement on the diverse subscribers' countries. On Portugal, the impact of this declaration has formally been manifested on the 105/97 governmental disposition, according to which the Portuguese education should follow an inclusive orientation (Rodrigues, 2003). Usually these postulates have a great relevance on basic and secondary education.

Resembling the international scene, the last Portuguese educational policies have encouraged the ingression of students with a sensorial and physical disability on Higher Education. On a context of a more opening attitude of Universities to a new audience, the number of students with a disability that enter Higher Education is growing day by day. This universities' population evolution towards diversity poses new challenges to the University, as a context that extensively contributes to the development of the youngsters that go in.

Among the several requirements for an Inclusive Higher Education, on this article, we put an emphasis in the social climate dimension, mediated by the values and social relations among its members (students, academic and services staff).

Answering the needs of students with a disability will not pass exclusively by investing in interventions

that are restricted to the academic success, as for instance planning personalised apprentice programs and activities. Considering, beyond the strictly academic transition, that university students live a developmental transition to the so called emerging adulthood, the academic experiences constitute an opportunity to the effectivation of developmental tasks related with autonomy, commitment with intimacy, and personal and social management (Arnett, 2000; Pascarella, & Terenzini, 1991).

Regarding the students with a disability, this opportunity can be a bigger challenge, when in their academic life they come across physical and attitudinal barriers, sometimes imperceptible to their peers who do not have a disability (Stanley, 2000). Accordingly, some authors indicate that students with a disability experience social problems, difficulties in the contact with professors and colleagues, lack of cooperation and understanding by their inmates, which puts them many times in a conflict position between an independence wish versus a help necessity (Reis, 1997; English, 1993; Synastchsk, 1994).

Studies focused on the academic path of the students with a disability have found that many of these students experience difficulties completing their study programs and in obtaining appropriate academic services and supports (Stodden, 2000). However, some studies focused on the social climate perception of the Universities they attend indicate that it seems to be favourably evaluated. Some researchers have focused on understanding the perceptions of students with disabilities about how other students, and other



university members perceive them (Elacqua, 1996). The students with disabilities tend to perceive more positive reactions by their peers, when the academic community reveals more support. The appropriate social support has been associated with the quality of the occupational functioning and persons' with a disability adjustment (Huebner, Thomas, & Berven, 1999) as well as the trust that the students put on their peers without a disability, in relation to the recognition of their needs and their identity respect (Stanley, 2000).

Nevertheless the great majority of the studies on disability area have their focus on the experience that the students with disability have of their acceptance on the university organization scope, there are some studies focalized on the attitudes that peers without a disability disclose in relation to the students with disabilities.

Concerning university attitudes towards students with disabilities, on a literature review, Rao (2004) identified faculty attitudes as a success factor for these students. In relation to the variables that interfere with attitudes from university community, some studies support the effect of gender, experience, academic rank, department affiliation, knowledge of the laws and type of disability, as having a significant effect. On the other hand, age has not shown to be related to these attitudes. On the university context, women present a more positive attitude towards disability, such as those who have had previous or have present contact with persons with a disability and those related to Softer Sciences.

Studies centred on the appreciation of life quality of people with a disability, regarding individuals that do not present that condition, have shown a tendency to its' undervaluation (Ubel, Lowenstein, & Jepson 2003; Riis, Loewenstein, Baron, & Jepson, 2005). On the other hand, studies focused on the emotional impact of the emergence of a disability go also in the way of a negative overevaluation (Gilbert, Pinel, Wilson, Blumberg, & Wheatley, 1998).

Literature related to the development of impressions indicate that the precedence of the physical attributes and the non familiarity with people with disability play a major role in the development of a negative impression of these people (Wright, 1983). Having a disability is a condition that too often creates a physical appearance that is far from the "usual", being hearing impairments an exception. What skips the norm usually becomes more salient, overwhelming the effects of positive aspects, creating some resistance. Normally negative aspects are also associated with rumination and create surveillance, therefore making the negative aspects have a higher weight on the evaluation of persons with a disability. Nevertheless, people with a disabling condition are

understood in a more favourable way than the condition itself.

Studies about interaction between students with disabilities and students without disabilities suggest strategies encouraging their social contact, in order to promote their attitude's change from negative to positive and the quality and efficiency of the university student's inclusion. The nature of the disability and its perception from the students without a disability are important factors mediating the social interaction and consequently the students with disability inclusion (Elacqua, 1996; Rao, 2004). Although empirical findings have been reported on staff university's perceptions concerning students with disabilities, research on students without disability perception of the impact on academic life is necessary to guide the development and provision of the needed inclusion practices. Nevertheless, very few studies about university community attitudes regarding students with disabilities and the impact of disability on academic life are reported in the literature (Leyser, Vogel, Wyland, Brulle, 1998). The present study was designed to pursue this line of research, assuming as background some relevant factors, such as familiarity with disability, gender of the students and the area of degree. The literature review suggests that those variables are important to explore the quality of the social interaction among students with disability and students without a disability. Assuming that the diverse types of disability (visual, hearing and motor) have different visibility and have associated specificities, we introduced this other factor in our analysis.

The present study is part of a larger project, supported by the National Scientific and Technology Foundation, oriented to the comprehension of the academic integration and success processes on students with a disability. On this article we present an exploratory study about how students without disability perceive the disability impact on the academic life. Oriented by the specificity of the experiences lived on the academic context, and the relevance of peers on the inclusion of the students with disabilities, in order to achieve a more complete perspective, the analysis considers the perceptions of disability impact on academic adjustment and achievement when we differentiate physical, visual and hearing disabilities. The specific objective of the study was to evaluate the attitudes of the students without a disability towards physical, visual and hearing impairments. Searching the minimization of the social desirability effect on the students' answers, we decided to evaluate the impact understood by these students confronting concrete situations of their academic life, if they experienced one of the kinds of disability considered.

## Method

### Participants

Of the 160 participants, 97 were female and 63 male college students without disability, from University of Minho, that is a public university. Participants were distributed throughout different college years: 9,4% were in their first college year, 23,1% were in second year, 22,5% were in the third year, 30% were in fourth year and 15% were in last year. They were from different knowledge domains: 53,7% were from technological sciences courses, 46,3% were from human and social sciences. From the 160 students, only 38 (23,8%) had a colleague with disability and no more than 12 (7,5%) had a friend with disability.

### Instruments

The *Perception of Disability Impact on Academic Life Questionnaire* – PDIALQ (Fernandes, Almeida, Soares, Veloso, Rodrigues & Mourão, 2007) is a 34-item self-report measure that uses a likert format to assess the perception of the impact of a disability on academic life events, with items answered on a 5 point scale ranging from (1) *far worst than now* to (5) *much better than now*. The questionnaire is divided on three subscales: academic involvement (12 items), curricular tasks (10 items) and autonomy (12 items). The impact of disability is assessed relating to these three a priori dimensions. On the three subscales higher scores indicate a better evaluation of the impact of disability on academic life.

*Academic Involvement* subscale includes items concerning active and curious presence in activities, that refer to the active and interested nature on the way of being on the activities, be them curricular ones or extracurricular. Therefore, we can consider that the Academic Involvement subscale evaluates the range through which students understand the disability impact at the level of their active and interested participation on the proposed or emergent activities on the academic context. Items included on this subscale are related, for example to “participating on discussion groups”, “inviting friends to go out”, or “requesting services help”. *Curricular Tasks* subscale includes items that focus on procedures and specific study and learning routines. This subscale evaluates the range through which the students understand the disability impact on the fulfilling of tasks or the easiness of the procedures associated to the academic fulfilment. Examples of the items there included are “writing a report”, “studying several hours”, or “reading support texts”. On the last dimension *Autonomy* the items are associated to the management skill of academic activities involved with the interdependency and/or personal mobility. This

dimension evaluates the range on which students understand the disability impact in the access to personal and/or social opportunities, as well as on the University services use. Some items examples are “going out at night with colleagues”, “having lunch on the canteen” or “going from home to the university”.

The factorial study of the questionnaire indicated that the multidimensional structure of the disability impact on academic life is common to the three types of impairments: physical, visual and hearing. The internal consistency (coefficient alpha of Cronbach) is adequate for all of the subscales, independently from the type of disability evaluated. Namely, the Academic Involvement subscale alpha, is .92 for the global sample, .88 to the sub-sample referenced to the physical disability, .91 to the sub-sample referenced to visual disability and .85 on the sub-sample referenced to the hearing disability. The Curricular Task subscale alphas are .91 for the global sample, .85 to the sub-sample that took as a reference the physical disability, .93 by reference to the visual disability and .78 by reference to the hearing disability. The Autonomy subscale alphas are .90 for the global sample, .87 to the sub-sample that took as a reference the physical disability, .88 by reference to the visual disability and .90 by reference to the hearing disability.

### Procedure

A previous consent from college staff was obtained to contact students and invite them to collaborate in the study. Participants were told that the study concerned “inclusive college education”, and it was explained the study background and objectives. Informed consent was obtained. Interested students participated voluntarily. The students were randomly distributed by three groups, answering individually to one of the three versions of the *Perception of Disability Impact on Academic Life Questionnaire*. The three versions differ only on the reference disability. Fifty three (33,1%) students answered the questionnaire using as a reference the physical disability, 62 (38,8%) students answered the questionnaire taking the visual disability by reference, and 45 (28,1%) students answered the questionnaire using the hearing disability as the reference. All questionnaires were administered between October and December of 2006. Data analysis was done with SPSS (15.0 version).

### Results

Analysis and results are presented in two sections. In the first section, we report means differences on the perceived disability impact dimensions, comparing the three groups of students. In the second section

set of analysis, we explored the effect of students' variables like gender, degree domain and contact with colleagues with disability, in their disability impact perception. All the analyses were made with the transformed scores (global score / N items of subscale).

### Perception of the disability impact on the three students sub-samples

Means and standard deviations on scores of the three *PIDALQs'* subscales, by the types of disabilities, are

presented on Table 1. Descriptive results show that academic involvement is better assessed by the students sub-sample that filled the questionnaire by reference to physical disability, and worse assessed by the students sub-sample that filled the questionnaire by reference to hearing disability. Concerning curricular tasks, the impact is worse assessed by students that answered the questionnaire by reference to visual disability. The impact on the autonomy is better assessed by students that answered the questionnaire by reference to the hearing disability.

**Table 1: Means and Standard Deviations on the three *PIDALQs'* Subscales, as a Function of types of Disabilities**

Type	N	Academic involvement				Curricular tasks				Autonomy			
		<i>M</i>	<i>SD</i>	Min	Max	<i>M</i>	<i>SD</i>	Min	Max	<i>M</i>	<i>SD</i>	Min	Max
Physical Disability	53	2,60	.44	1,33	3,08	2,50	.46	1,10	3,30	1,84	.47	1,00	3,58
Visual Disability	61	2,30	.62	1,00	3,92	1,71	.60	1,00	3,40	2,00	.53	1,00	3,42
Hearing Disability	45	1,70	.42	1,00	2,58	2,60	.32	1,80	3,00	2,41	.45	1,00	3,00

In general means scores on three dimensions, independently of the disability type considered, are lower than an intermediate score. So, student's perception about the colleagues with sensorial and physical disability on academic involvement, curricular tasks and autonomy areas are not quite positive. The statistical significance of fluctuation on mean scores was analysed (f. Oneway). Significant statistical differences were found relating to the three dimensions of the disability impact: academic involvement (f (2;154)=36,76; p<.001); curricular tasks (f (2;154)=54,65; p<.001) and autonomy (f (2;152)=16,22; p<.001). In a complementary way a contrast analysis was used (post-hoc contrasts with Scheffe procedure). The perceptions of hearing disability's impact on academic involvement are worse (negative) than perceptions of physical disability's impact (mean differences: -.90; p<.001) and of visual disability's impact (mean differences: -.62; p<.001). At the same time perceptions of visual disability's impact on academic involvement are worse than perception of physical disability's impact (mean differences: -.27; p<.05). On the Curricular Tasks dimension the perceptions of visual disability's impact are worse than perceptions of physical disability's impact (mean differences: -.78; p<.001) and

hearing disability impact (mean differences: -.91; p<.001). The perceptions of physical disability's impact is worse than hearing disability's impact (mean differences: -.12; p<.05). Regarding autonomy the perceptions of physical disability's impact are worse than perceptions of visual disability's impact (mean differences: -.11; p=.50) and hearing disability's impact (mean differences: -.54; p<.001). The perceptions of visual disability's impact on this dimension are worse than perceptions of hearing disability's impact (mean differences: -.43; p<.001).

### Effect of gender and degree domain on the disability's impact perception of students without disability

Facing the low inter-correlations between results on the three dimensions of the questionnaire, we made an analysis of variance, assuming the gender and the degree domain by F Anova (2x2), this for the three sub samples.

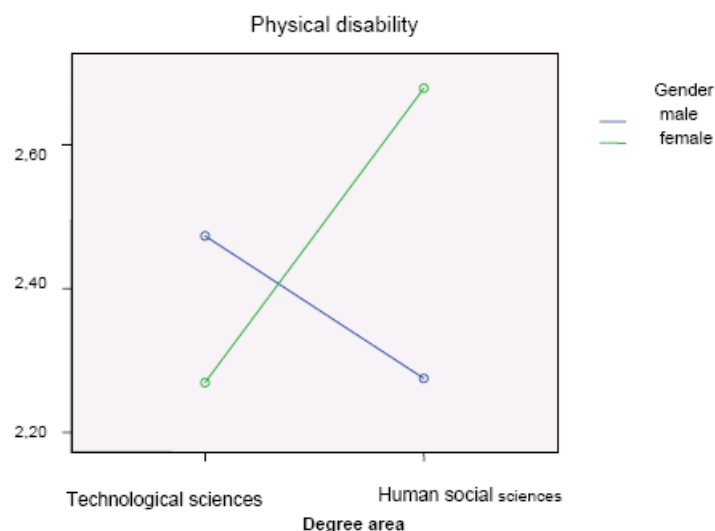
Means and standard deviations on scores of the three *PIDALQs'* subscales, by gender and degree area, are presented on Table 2 regarding the sub sample of physical disability's impact.

**Table 2: Means and standard deviations on the three *PIDALQs*' subscales, as a function of gender and degree domain**

Gender	Degree domain	Academic involvement	Curricular task	Autonomy
		<i>M.</i> ( <i>SD</i> )	<i>M.</i> ( <i>SD</i> )	<i>M.</i> ( <i>SD</i> )
Male	Sciences and technologies (N=15)	2,51 .54	2,50 .39	1,90 .47
	Human and social sciences (N=5)	2,31 .64	2,28 .40	1,50 .46
Female	Sciences and technologies (N=13)	2,50 .41	2,23 .62	1,67 .39
	Human and social sciences (N=20)	2,78 .19	2,71 .32	2,11 .48

Relating to the Academic Involvement dimension no interaction effects were observed ( $F=2,85$ ;  $p=.10$ ), nor gender effects ( $F=3,35$ ;  $p=.07$ ) nor area degree effect ( $F=.41$ ;  $p=.54$ ). On the Curricular Tasks dimension it can be observed a significant interaction effect ( $F=4,28$ ;  $p<.05$ ). The Figure 1 shows that female students who attend human and social sciences tend to perceive the impact of physical disability on cur-

ricular tasks as more positive than their female colleagues that attend a technologic sciences degree. Nevertheless male students affiliated to human and social sciences assessed this impact in a more negative way than their male colleagues of technological sciences. Comparing students from human and social sciences, female perceived the physical disability impact as better than their male colleagues.

**Estimated Marginal Means of curricular tasks****Figure1: Degree area and gender effect; curricular tasks; physical disability**

Therefore, relating gender variable ( $F=.46$ ;  $p=.50$ ) and the degree domain ( $F=.52$ ;  $p=.50$ ) the values do not present themselves as differentiated in a statistical significant way. Last, relating to the Autonomy dimension it can be observed significant effects of interaction ( $F=5,47$ ;  $p<.05$ ), but it can not be observed nor significant gender ( $F=.84$ ;  $p=.36$ ) nor area degree effects ( $F=.32$ ;  $p=.86$ ). Figure 2 shows that female students who attend human and social sciences tend

to perceive the impact of physical disability on autonomy as more positive than their female colleagues that attend a technologic sciences degree. Nevertheless male students affiliated to human and social sciences assessed this impact in a more negative way than those of technological sciences. Male students from human and social sciences assessed this disability's impact as worse than their female colleagues.

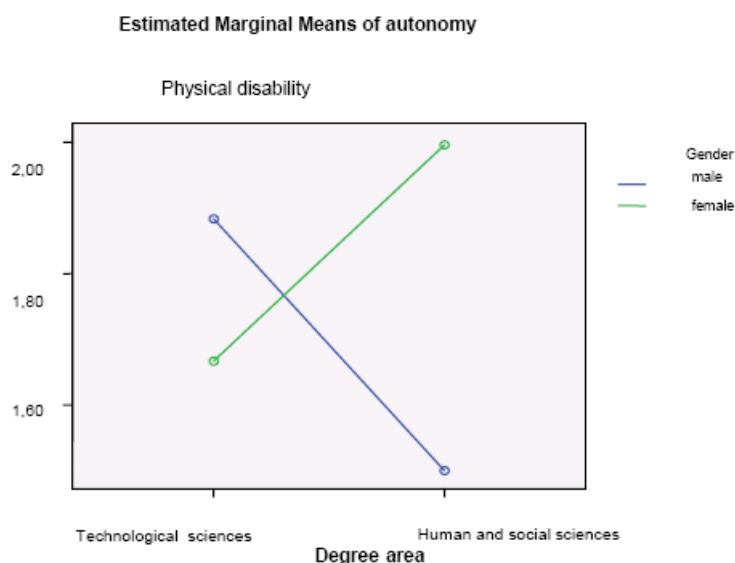


Figure 2: Degree area and gender interaction effect; autonomy; physical disability

Concerning the sub sample of visual disability, Table 3 presents means and standard deviations on scores

for the three *PIDALQs*' subscales, by gender and degree area.

**Table 3: Means and standard deviations on the three *PIDALQs*' subscales, by gender and degree domain**

Gender	Degree domain	Academic involvement	Curricular task	Autonomy
		<i>M.</i> ( <i>SD</i> )	<i>M.</i> ( <i>SD</i> )	<i>M.</i> ( <i>SD</i> )
Male	Sciences and technologies (N=17)	2,41 .61	1,76 .65	2,11 .53
	Human and social sciences (N=6)	2,51 .87	2,28 .36	2,27 .26
Female	Sciences and technologies (N=12)	2,21 .63	1,67 .60	1,96 .50
	Human and social sciences (N=26)	2,24 .58	1,58 .56	1,78 .53

In relation to the Academic Involvement dimension none interaction effects were observed ( $F=.002$ ;  $p=.96$ ), nor gender effects ( $F=2,00$ ;  $p=.16$ ) nor area degree effects ( $F=.25$ ;  $p=.62$ ). On the Curricular Tasks dimension it can not be observed nor a significant interaction effect ( $F=2,99$ ;  $p=.10$ ) nor a degree area effect ( $F=1,40$ ;  $p=.24$ ). Nevertheless it can be observed a significant gender effect ( $F=4,74$ ;  $p<.05$ ). Female students, independently of degree area, tend to perceive the visual disability's impact on curricular

tasks worse than their male colleagues. Relating to the Autonomy dimension it can not be observed nor significant effects of interaction ( $F=1,11$ ;  $p=.31$ ), nor gender effects ( $F= 4,11$ ;  $p=.50$ ) nor area degree ( $F=.003$ ;  $p=.96$ ).

Regarding the sub sample of hearing disability, Table 4 presents means and standard deviations on scores for the three *PIDALQs*' subscales, by gender and degree area.

**Table 4: Means and standard deviations on the three *PIDALQs*' subscales, by gender and degree domain**

Gender	Degree domain	Academic involvement	Curricular task	Autonomy
		<i>M.</i> ( <i>SD</i> )	<i>M.</i> ( <i>SD</i> )	<i>M.</i> ( <i>SD</i> )
Male	Sciences and technologies (N=16)	1,57 .33	2,61 .35	2,45 .36
	Human and social sciences (N=2)	1,83 .71	2,35 .35	1,67 .94
Female	Sciences and technologies (N=10)	1,65 .45	2,48 .40	2,23 .51
	Human and social sciences (N=15)	1,79 .48	2,72 .17	2,54 .33



In relation to the Academic Involvement dimension no interaction effects were observed ( $F=.11$ ;  $p=.74$ ), or gender effects ( $F=.01$ ;  $p=.93$ ) or area degree effect ( $F=1.21$ ;  $p=.28$ ). In the same way, on the Curricular Tasks dimension no significant interaction effect was observed ( $F=3.45$ ;  $p=.07$ ) or gender effects ( $F=.85$ ;  $p=.36$ ) or degree area effects ( $F=.004$ ;  $p=.95$ ). However, relating to the autonomy dimension it can be observed a significant interaction effect ( $F=9.34$ ;  $p<.05$ ), but not an independent gender effect ( $F=3.36$ ;

$p=.07$ ) or a degree area effect ( $F=1.71$ ;  $p=.20$ ). Figure 3 shows that female students affiliated to technological sciences perceived a more negative impact of hearing disability on autonomy than those associated to human and social sciences, while their male colleagues perceived this impact as a more positive than male students associated to human and social sciences. In addition, differences on the gender perceptions of impact are greater on students from human and social sciences.

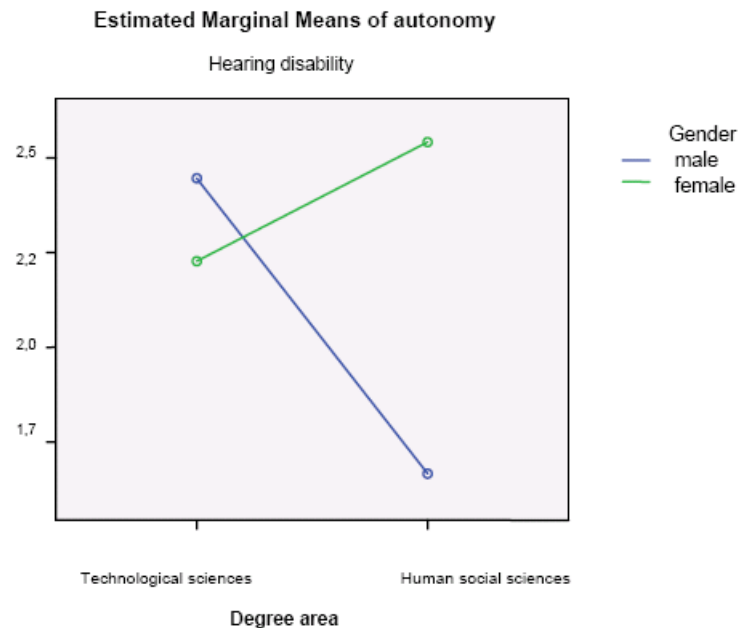


Figure 3: Degree area and gender interaction effect; autonomy; hearing disability

An independent sample  $t$ 'test was calculated to analyse means differences of the groups with and without contact, on the three impact dimensions. This procedure occurred by reference to the three types of disability. Table 5 presents the results of the

analysis, on the three dimensions subscales according to the presence or lack of contact with colleagues with a disability, for the sub sample referenced to physical disability.

**Table 5: Values on dimensions subscales; Presence or lack of contact with a disability**

	Groups	N	M	SD	t	df	Prob.
Academic involvement	With contact	18	2,65	.19	-1.31	48	$P=.20$
	Without contact	35	2,52	.52			
Curricular tasks	With contact	17	2,56	.24	-.90	49	$p=.37$
	Without contact	34	2,44	.54			
Autonomy	With contact	18	1,79	.32	.62	50	$p=.54$
	Without contact	34	1,87	.54			

Table 6 presents the results of the analysis on the three dimensions subscales according to the presence

or lack of contact with colleagues with a disability for the sub sample referenced to visual disability.

**Table 6: Dimensions subscales; presence or lack of contact with colleagues with a disability**

	Groups	N	<i>M</i>	SD	<i>t</i>	df	Prob.
Academic involvement	With contact	11	2,51	.38	-1.14	59	<i>P</i> =.37
	Without contact	50	2,26	.66			
Curricular tasks	With contact	11	1,45	.33	2,38	59	<i>P</i> <.05
	Without contact	50	1,76	.64			
Autonomy	With contact	11	1,96	.41	-.06	57	<i>p</i> =.95
	Without contact	48	1,95	.56			

Table 7 presents the results of the analysis on the three dimensions subscales according to the presence

or lack of contact with colleagues with a disability for the sub sample referenced to hearing disability.

**Table 7: Dimensions subscales; presence or lack of contact with colleagues with a disability**

	Groups	N	<i>M</i>	SD	<i>t</i>	df	Prob.
Academic involvement	With contact	9	1,75	.45	-.57	41	<i>P</i> =.58
	Without contact	34	1,66	.42			
Curricular tasks	With contact	9	2,66	.26	-.55	43	<i>P</i> =.58
	Without contact	36	2,61	.34			
Autonomy	With contact	9	2,43	.62	-.29	42	<i>p</i> =.77
	Without contact	35	2,38	.41			

Taking by reference the obtained values the students who have contact with colleagues with a disability seem to present more favourable attitudes, evaluating the impact of disability on academic experiences in a more positive way. An exception to this tendency can be observed for the perceived impact of the visual disability on the curricular tasks. Curiously this is the significant one ( $t=2,38$ ;  $df=59$ ;  $p<.50$ ).

## Discussion and conclusions

The results of the present study show that students without a disability present an overall tendency to evaluate negatively the impact of disability on academic life, either when considering the impact on the Academic Involvement, Curricular Tasks and Autonomy, and these perceptions are negative independent from the type of disability they have as a reference. These findings can be understood as a result of the stereotypy associated to this population, which is consistent with the idea that persons without a disability tend to subevaluate the quality of life of those with a disability (e.g. Riis, et al., 2005). In addition, considering that we asked participants to imagine themselves having a disability condition

these results are coherent with the conclusions of studies focused on the perceived emotional impact of a disability that show a negative exacerbation of this impact (e.g. Gilbert, et al. 1998).

Nevertheless there exists a tendency to evaluate negatively the impact of a disability, whatever the impact dimension considered, some differences have been found on the evaluation of each dimension by the students without disability when considering the different types of disabilities. We found that related to the Academic Involvement dimension students without a disability tend to evaluate in a more negativistic way the impact of a hearing disability comparing those evaluating physical or visual impairments. This result suggests that, when students without a disability, imagine themselves with a hearing impairment condition, they perceive the difficulties associated with an active and interested participation, usually mediated by communication, where barriers seem to be more evident for this condition. On the Curricular Tasks dimension it were the students that imagined themselves developing a visual impairment condition that evaluated in a worst way the impact of disability. Given that few students have a contact with students with a disability this result can be ex-

plained by the lack of knowledge of the students without a disability of the technical equipments that provide students with a disability with study routines, such as reading or elaborating a text. Analysing the Autonomy dimension we see that students who have taken as a reference visual and physical impairments evaluated the impact of these disabilities in a more negative way when compared with students who have taken by reference the hearing impairments. This result can be understood as a perception that students' autonomy can be prejudiced when the disabilities considered, apparently, are associated with physical barriers to personal mobility and social interaction.

Our results about degree area are somewhat different from those reported on literature in the way that, they indicate significant interaction effect of this variable with gender, namely on curricular tasks and autonomy, for physical and hearing disability' impact. Regarding gender effect, our study challenges the literature that state the more favourable disability perception from women. Specifically, female students seem to evaluate visual disability impact, on curricular tasks, worse than male. However, the present study provided no significant evidence that university students close to colleagues with disability perceived this condition in a more positive way, it suggests a general tendency. Nevertheless the perception of visual disability's impact on curricular tasks,

seems to be worse for those students more familiar with a disability. Based on the literature review these results are not expected. However, they suggest that the students more familiar with disability have a more realistic perception and know better the difficulties of students with visual disability.

We can conclude from this study that familiarity and close contact with students with disability can promote a realistic perspective regarding the difficulties faced by students with disability therefore giving these students appropriate support. In addition, this study supports the idea that an university inclusive education, assuming the complexity of academic students' development, needs to pay attention to the specificity of disability and the complex interaction between important variables on social climate among their different students. To accommodate the diversity has to be a bottom-up process, increasing the opportunities for the mutual knowledge and for day by day interaction on academic life.

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### *Prof. Eugénia Maria Fernandes*

I'm teaching in a clinic psychology course. I made a PhD in clinical psychology and I'm a psychotherapist and clinical supervisor at the University Clinical Centre. My current research interests are focused on the human change in psychotherapy; in particular, relational and cognitive processes associated with therapeutic process; and on participant's subjective experience of psychotherapy. Recently I'm interested on understanding cognitive and relational processes involved on self's change in people with disabilities. I'm the main researcher of the Project Integration Processes and Academic Success of University Students with Disability, this supported by the National Scientific and Technology Foundation, and I supervise some master thesis on this disability and rehabilitation. Other activities that have received my attention included the study of psychological adjustment associated with diversity/ quality of personal experiences during life transitions events

### *Prof. Leandro Almeida*

I'm a PhD in Educational Psychology and Full Professor of School Psychology at University of Minho. My main research topics concern cognition and learning at different academic levels. Recently I'm involved in the transition and adjustment to university, namely with non traditional students (older and ethnic minorities), where the personal and institutional variables are considered in a preventive approach to academic failure and drop-out. Actually I'm Vice-Rector of the University of Minho for the pedagogical area.

### *Joana Mourão*

I've been practicing clinical psychology at the University of Minho Clinical Centre for two years now and i'm starting my PhD in this area. My current research interests are focused on the psychotherapeutic process as it unfolds on the inter and intra session level, regarding the interpersonal relationships. I've integrated the Integration Processes and Academic Success of University Students with Disability Project as a researcher.

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